

Caspase 2 (CASP2) Active Protein | CASP2 active protein

Active Caspase 2 (CASP2)

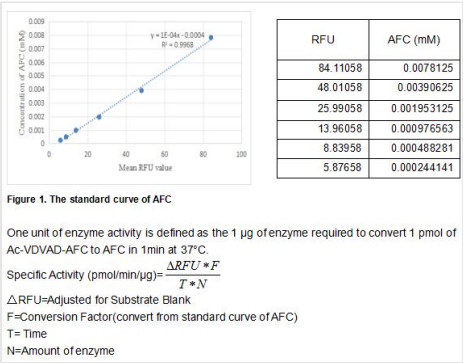
CATALOG # AAA161718	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Caspase 2 (CASP2); Active Caspase 2 (CASP2); Caspase 2; ICH1L; NEDD2; ICH-1L/1S; CysteinyI Aspartate Specific Proteinases 2; Apoptosis-Related Cysteine Peptidase; Neural Precursor Cell Expressed Developmentally Down-Regulated 24; CASP2 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Gly170~Thr 452
Applicable Applications for CASP2 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.9
Research Area	Apoptosis
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

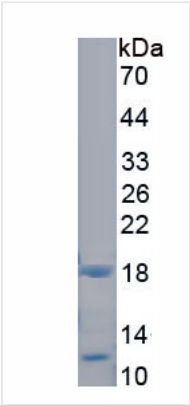


Bioactivity

Caspase-2 (CASP2) is a 3032 kDa member of the peptidase C14A/IL1 beta-converting family of enzymes. It is widely expressed and is an integral component of the apoptotic cascade. Based on the length of its prodomain, caspase-2 has been considered to be an initiator caspase. Human procaspase-2 is a 4851 kDa, 452 amino acid (aa) protein. It is known to exist as a disulfide-linked homodimer via covalent linkage at Cys436. But this dimeric state may not be sufficient for (auto) activation. Actual activation may occur following oligomerization within the context of activating platforms such as DISC (death-inducing signaling complex) or the PIDDosome. The activity assay of recombinant human CASP2 was measured by its ability to cleave the fluorogenic peptide substrate Ac-VDVAD-AFC. The reaction was performed in 25 mM HEPES, 0.1% (w/v) CHAPS, 10 mM dithiothreitol (DTT), pH 7.5 (Assay Buffer). The CASP2 was diluted to 3 μ g/ml by assay buffer and incubated at room temperature for 15min. The reaction was initiated by adding 50 μ l 3 μ g/ml CASP2 to 50 μ l of 200 μ M substrate and then read at excitation and emission wavelengths of 400 nm and 505 nm (top read), respectively, in kinetic mode for 5 minutes. The specific activity of recombinant human CASP2 is 2100 pmol/min/ μ g.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for CASP2 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4502575
NCBI GeneID	835
NCBI Accession #	NP_001215.1
NCBI GenBank Nucleotide #	NM_001224.4
UniProt Accession #	P42575; P42576; Q59F21; Q7KZL6; Q86UJ3; Q9BUP7; Q9BZK9; Q9BZL0; A8K5F9; D3DXD6; E9PDN0
Molecular Weight	50,685 Da
NCBI Official Full Name	caspase-2 isoform 2
NCBI Official Synonym Full Names	caspase 2, apoptosis-related cysteine peptidase
NCBI Official Symbol	CASP2
NCBI Official Synonym Symbols	ICH1; NEDD2; CASP-2; NEDD-2; PPP1R57
NCBI Protein Information	caspase-2; protease ICH-1; protein phosphatase 1, regulatory subunit 57; neural precursor cell expressed developmentally down-regulated protein 2
UniProt Protein Name	Caspase-2
UniProt Gene Name	CASP2
UniProt Synonym Gene Names	ICH1; NEDD2; CASP-2; NEDD-2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/caspase-2-casp2/161718>